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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,186	10/29/2001	Damon John Ennis	402	4116
33932	7590	11/25/2005		
CIENA CORPORATION 1201 WINTERSON ROAD LINTHICUM, MD 21090			EXAMINER PHAM, KHANH B	
			ART UNIT 2166	PAPER NUMBER

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/003,186	ENNIS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Khanh B. Pham	2166	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48,61 and 62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48,61 and 62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-48, 61-62 are rejected under 35 U.S.C. 102(b)** as being anticipated by Bracho et al. (US 5,974,417 A), hereinafter “Bracho”

**As per claims 1, 17, 33**, Bracho teaches a method, an apparatus and computer readable medium for facilitating publish/subscribe communication within a network switch (See Fig. 1), comprising:

- “receiving a subscription request by a communication coordinator within one of a plurality of line modules to receive publications made to one or more event names” at Col. 4 line 64 to Col. 5 line 4, Col. 10 lines 1-34 and Fig. 5;
- “said subscription request comprising an event expression that includes a namespace that can be correlated to a plurality of different event names” at Col. 10 line 65 to Col. 11 line 25 and Col. 15 lines 40-62;
- “accessing within a control module connected to said plurality of line modules a set of information pertaining to a publisher, said information comprising a particular event name to which said publisher publishes” at Col. 5 lines 5-25, Col. 10 lines 1-34 and Fig. 5;

- “and resolving said event expression within said control module to determine whether said particular event name constitutes a match for said event expression” at Col. 5 lines 5-25 ,
- “thereby determining whether said subscription request is a request to receive one or more publications made to said particular event name” at Col. 2 lines 24-31.

**As per claims 2, 18, 34**, Bracho teaches the method, apparatus and computer readable medium of claims 1, 17, 33 as discussed above, wherein “said event expression comprises one or more wildcard indicators” at Col. 9 lines 5-25.

**As per claims 3, 19, 35**, Bracho teaches the method, apparatus and computer readable medium of claims 2, 18, 34 as discussed above, wherein “resolving said event expression comprises: performing pattern matching between said event expression and said particular event name” at Col. 11 lines 3-25.

**As per claims 4, 20, 36**, Bracho teaches the method, apparatus and computer readable medium of claims 1, 17, 33 as discussed above, wherein “said namespace is a hierarchical namespace” at Col. 15 lines 40-62.

**As per claims 5, 21, 37**, Bracho teaches the method, an apparatus and computer readable medium of claims 4, 20, 36 as discussed above, wherein “said hierarchical namespace comprises one or more wildcard indicators in one or more hierarchical levels of said hierarchical namespace” at Col. 9 lines 1-55.

**As per claims 6, 22, 38**, Bracho teaches the method, apparatus and computer readable medium of claims 1, 17, 33 as discussed above. Bracho further teaches:

- “said subscription request comprises a set of information pertaining to a subscriber” at Col. 8 lines 17-30;
- “and wherein said method further comprises: in response to a determination that said particular event name constitutes a match for said event expression, providing said set of information pertaining to said subscriber to a communication coordinator associated with said publisher” at Col. 8 lines 30-50.
- “said communication coordinator being one of a plurality of communication coordinators provided on each of said plurality of line modules within said switch” at Col. 8 lines 30-50.

**As per claims 7, 23, 39**, Bracho teaches the method, apparatus and computer readable medium of claims 6, 22, 38 as discussed above. Bracho further teaches:

- “accessing a set of information pertaining to a second publisher, said set of information pertaining to said second publisher comprising a second particular event name to which said second publisher publishes” at Col. 6 lines 55-67;
- “resolving said event expression to determine whether said second particular event name constitutes a match for said event expression, thereby determining whether said subscription request is a request to receive one or more publications made to said second particular event name” at Col. 14 lines 50-67;
- “and in response to a determination that said second particular event name constitutes a match for said event expression, providing said set of information pertaining to said subscriber to a second communication coordinator associated with said second publisher” at Col. 14 lines 50-67.

**As per claims 8, 24, 40**, Bracho teaches the method, apparatus and computer readable medium of claims 7, 23, 39 as discussed above, wherein “said first particular event name and said second particular event name are different event names” at Col. 14 lines 50-67.

**As per claims 9, 25, 41**, Bracho teaches a method, an apparatus and computer readable medium for facilitating publish/subscribe communication within a network switch (See Fig. 1), comprising:

- “receiving by a communication coordinator within one of a plurality of line modules a publication announcement indicating a desire to publish to a particular event name” at Col. 6 lines 55-67;
- “accessing within a control module connected to said plurality of line modules a set of information pertaining to a subscriber, said information comprising an event expression which may be resolved to match a plurality of different event names” at Col. 11 lines 1-25; and
- “resolving said event expression within said control module to determine whether said particular event name constitutes a match for said event expression, thereby determining whether said subscriber should receive one or more publications made to said particular event name” at Col. 14 lines 50-67.

**As per claims 10, 26, 42**, Bracho teaches the method, apparatus and computer readable medium of claims 9, 25, 41 as discussed above, wherein “said event expression comprises one or more wildcard indicators” at Col. 9 lines 1-55.

**As per claims 11, 27, 43**, Bracho teaches the method, apparatus and computer readable medium of claims 10, 26, 42 as discussed above, wherein “resolving said event expression comprises: performing pattern matching between said event expression and said particular event name” at Col. 11 lines 17-25.

**As per claims 12, 28, 44**, Bracho teaches the method, apparatus and computer readable medium of claims 9, 25, 41 as discussed above, wherein “said event expression comprises a hierarchical namespace” at Col. 15 lines 40-62.

**As per claims 13, 29, 45**, Bracho teaches the method, apparatus and computer readable medium of claims 12, 28, 44 as discussed above, wherein “said hierarchical namespace comprises one or more wildcard indicators in one or more hierarchical levels of said hierarchical namespace” at Col. 15 lines 40-62 and Col. 9 lines 1-55.

**As per claims 14, 30, 46**, Bracho teaches the method, apparatus and computer readable medium of claims 9, 25, 41 as discussed above, further comprising: “in response to a determination that said particular event name constitutes a match for said event expression, providing said set of information pertaining to said subscriber to a sender of said publication announcement” at Col. 15 lines 8-39.

**As per claims 15, 31, 47**, Bracho teaches the method, apparatus and computer readable medium of claims 14, 30, 46 as discussed above, further comprising:

- “receiving a second publication announcement indicating a desire to publish to a second particular event name” at Col. 7 lines 45-67;
- “accessing said set of information pertaining to said subscriber; resolving said event expression to determine whether said second particular event name

constitutes a match for said event expression, thereby determining whether said subscriber should receive one or more publications made to said second particular event name” at Col. 10 lines 20-35 and Col. 11 lines 17-25;

- “and in response to a determination that said second particular event name constitutes a match for said event expression, providing said set of information pertaining to said subscriber to a sender of said second publication announcement” at Col. 8 lines 17-30.

**As per claims 16, 32, 48,** Bracho teaches the method, apparatus and computer readable medium of claims 15, 31, 47 as discussed above, wherein “said first particular event name and said second particular event name are different event names” at Col. 5 lines 10-20.

**As per claim 61,** Bracho teaches the method of claim 1, wherein “each of said plurality of line modules include a local table in which is stored information pertaining to a particularly one of said plurality of line modules” at Col. 10 lines 1-19.

**As per claim 62,** Bracho teaches the method of claim 1, wherein

- “the control module includes a namespace server that includes a global table containing all local table information from each of said plurality of line modules” at Col. 10 lines 35-45,
- “the name server using information in the global table to coordinate communication through out the network switch” at Col. 11 lines 27-39.



***Response to Arguments***

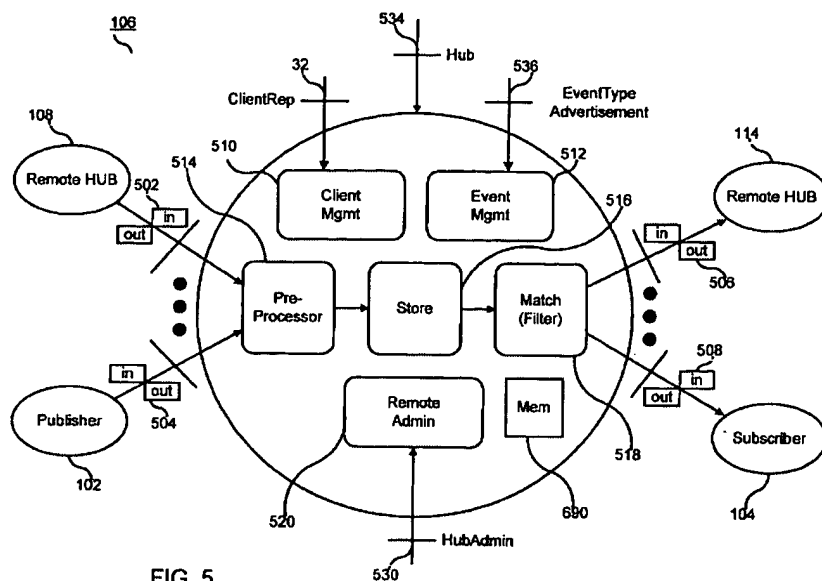
3. Applicant's arguments filed September 13, 2005 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Applicant states in the remark, page 19 that applicant's invention directs to a network switch include components defined by their functions as follows:

- "a plurality of line modules";
- "a communicator coordinator in a line module for receiving subscription";
- "a control module connected to the line module for accessing information related to the subscription request and determines whether a particular event name constitutes a match for an event expression"

Applicants argued that Bracho does not teach "the plurality of line modules, communication coordinator and control module as claimed". On the contrary, Bracho teach a hub comprises multiple modules for performing the same functions as claimed. Particularly, Bracho teaches at Col. 10 lines 1-35 and Fig. 5 the following:

- "Events received by hub 106 are stored in event priority order in respective **event queues 502, 504**";
- "**Event manager** block 512 deals with managing system events, such as **receipt** of new connections, types, routings, advertisements, and **subscriptions**";
- "**Match block** 518 adds routing information to events, filters events in manner described below in connection with **event routing**, and routes events to appropriate other connected hub".



The examiner therefore maps Bracho's "event queues" 502, 504 and "event manager" 512 to the claimed "line modules"; and "event manager" 512 to "communication coordinator" and "Match block" 518 to the claimed "control module". As discussed above, both Bracho's "event manager" 512 and the claimed "communication coordinator" are for receiving subscription request. Bracho also teaches the Match block 518 connects to the line module (i.e., the line connecting 518 and 508) for accessing information related to the subscription request from subscriber 104 and determines whether a particular event name constitutes a match for an event expression.

In response to applicants' argument that Bracho does not teach a plurality of line modules within the hub because the event queues are not line modules as claimed, the examiner respectfully submits that, as discussed above, Bracho's "event queues" 502, 504 and "event manager" 512 together perform the same function as the claimed "line

module". Applicants only argued that "the event queues are not line modules as claimed" but did not particular point out how and why they are different.

Applicants argued that Bracho fails to teach " a communication coordinator within a line module which receives publication and subscription request". On the contrary, as discussed above, Bracho teaches the "Event manager" 512 for receiving subscriptions, and Bracho's "Event manager" is within the line module as claimed because the line module comprises "event manager" and "event queues".

Applicants argued that Bracho fail to teach "a control module connected to a line module" because "the match filter is not connected to a line module to receive information therefrom". On the contrary, as discussed above, Bracho teaches the "Match block" 518 connect to a line module (via the line between 518 and 508.)

Bracho teaches all limitation of independent claims 1, 9, 17, 25, 33, 41 as discussed in this Office Action, the 102 rejection to claims 1, 9, 17, 25, 33 and 41 and their dependent claims are hereby sustained.

### **Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

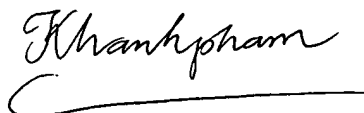
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 17, 2005

Khanh B. Pham  
Examiner  
Art Unit 2166

A handwritten signature in cursive script, reading "Khanh B. Pham", followed by a long horizontal flourish line.